



USACE MILCON Transformation

**Centers of Standardization Program Manager
Louisville District**





MT – Goals and Objectives

- **Deliver facilities @ 15% less cost than routine MCA process**
- **30% cradle-to-grave schedule reduction with construction completed in 15-24 months**
- **Facilities with 25 year re-purpose/reuse cycle and a 50 year building life**
- **Achieve Army sustainability standards**
 - LEED - Silver
 - Epect 2005 – Energy Reduction
- **Continue to meet Army/DoD Small Business goals**





MT – USACE 3-Part Strategy

- **Expand Standardization...**
- **Build Better, Faster, Cheaper...**
- **Use Innovative/aggressive acquisition strategy and contracting mechanisms**





MT – USACE 3-Part Strategy

Expand Standardization...

- **Standardization of Facilities**
- **Standardization of Processes (Across USACE)**

Build Better, Faster, Cheaper...

Use Innovative/aggressive acquisition strategy and contracting mechanisms





MT – USACE 3-Part Strategy

Expand Standardization...

- Standardization of Facilities
- Standardization of Processes (Across USACE)

Build Better, Faster, Cheaper...

- **Better**:. Incorporate interior space flexibility, emphasize quality in what's seen and meet code in what's not seen.
- **Faster**: 30% project execution time savings
- **Cheaper**: Build the most possible within funds available (recognize 15% cost savings already taken off the top)

Use Innovative/aggressive acquisition strategy and contracting mechanisms





MT - District Responsibilities

Geographic District (G-D)

- PM for the project and the USACE interface w/ installation
- Leads the planning charrette efforts to develop 1391s
- Project site development design and construction contract
- Building-site design integration and construction contract oversight
- Facility and site code compliance reviews

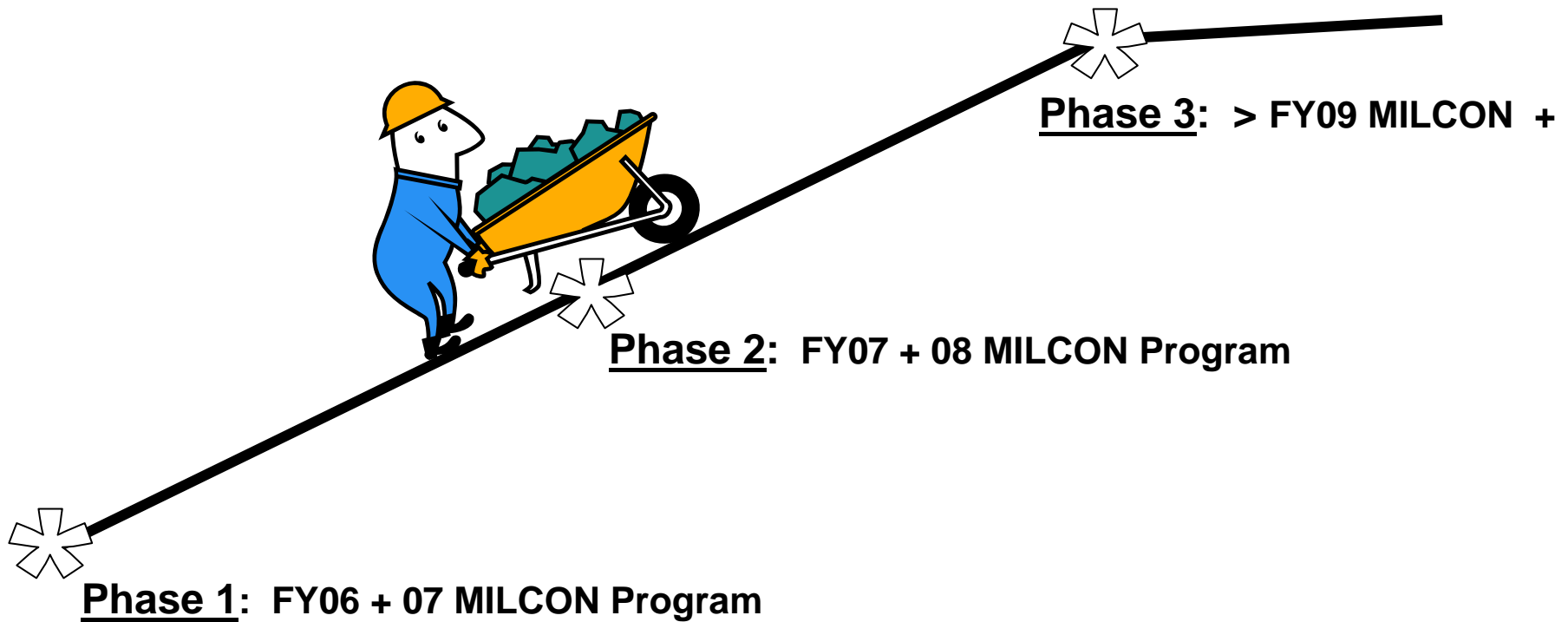
Centers of Standardization (COS)

- Design Center: develop and maintain standard facility designs/criteria
- Enforce the Army standards at projects design charrettes
- Award regional IDIQ design/construction task order contracts for district execution
- Technical resource during project construction activities
- Capture lessons-learned and revise prototype models
- Use BIM, require BIM



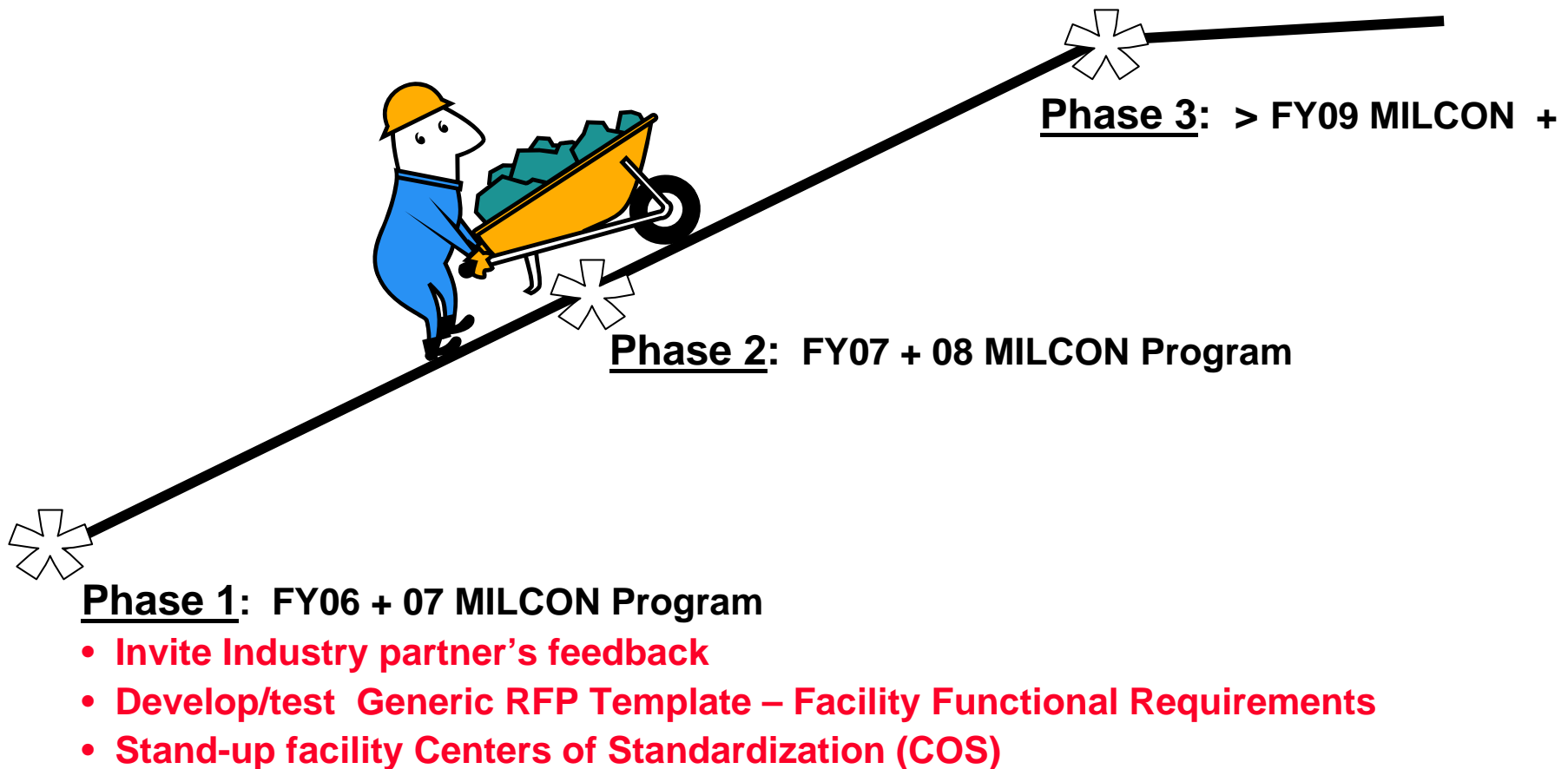


MILCON Transformation – Getting There





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MILCON Transformation – Getting There



Phase 3: > FY09 MILCON +

Phase 2: FY07 + 08 MILCON Program

- Use Standardized D/B construction contracts
- Develop prototype adapt-build facility models & RFP packages
- Implement regional construction contract strategies
- Issue + Award + Execute FY08 Regional IDIQ contracts

Phase 1: FY06 + 07 MILCON Program

- Invite Industry partner's feedback
- Develop/test Generic RFP Template – Facility Functional Requirements
- Stand-up facility Centers of Standardization (COS)





MILCON Transformation – Getting There



Phase 3: > FY09 MILCON +

- Standardize adapt-build regional facility designs
- Incorporate LL / design updates
- Transition to design-bid-build contracts

Phase 2: FY07 + 08 MILCON Program

- Use Standardized D/B construction contracts
- Develop prototype adapt-build facility models & RFP packages
- Implement regional construction contract strategies
- Issue + Award initial FY08 Regional IDIQ construction contracts

Phase 1: FY06 + 07 MILCON Program

- Invite Industry partner's feedback
- Develop/test Generic RFP Template – Facility Functional Requirements
- Stand-up facility Centers of Standardization (COS)





COS – (8) Locations / (41) Product-Lines

➤ **Huntsville Center (15)**

- Physical Fitness
- Outdoor Sports Facility
- Child Development (2)
- Youth Activity Centers
- Consolidated Fire, Safety and Security Facility
- Fire Station
- Army Community Service Center
- Bowling Center RFP
- Hazard Material Storage
- Range and Training Lands
 - Close Combat Tactical Trainer
 - Mil. Ops. Urban Terrain Facility
 - Training Ranges
 - Battle Cmd Training Ctr.
 - Training Support Ctr.
- Medical Facilities

➤ **Louisville District/LRD (2)**

- Army Reserve Centers
- Operational Readiness Training Complex

➤ **Norfolk District/NAD (7)**

- General Instructional Facility
- Classroom 21
- Enlisted personnel Dining Facility
- Mil. Entrance Processing Stations
- Family Housing RFP
- Information Systems Facility
- Criminal Investigation Facility

➤ **Omaha District/NWD (2)**

- Religious Facilities
- Access Control Points

➤ **Mobile District/SAD (2)**

- Aviation – Vertical Construction
- 4 Star HQ Facility (Design District)

➤ **Savannah District/SAD (6)**

- Company Operations Facility
- Tactical Equipment Maintenance
- Brigade Operations Complex
- Brigade/ Battalion HQ: Admin
- Cmd./Control : UEy (2-star) and Corps (UEx – 3-star) HQ: Admin/Operations
- Deployment Facility

➤ **Honolulu District/POD (2)**

- Unaccompanied Officers Quarters
- Transient Officers Quarters

➤ **Ft. Worth District/SWD (5)**

- Unaccompanied Enlisted Personnel Housing
- Basic Combat Training Complex/One Station Unit Trainee
- Advanced individual Training Complex
- General Purpose Warehouse
- Central Issue Warehouse



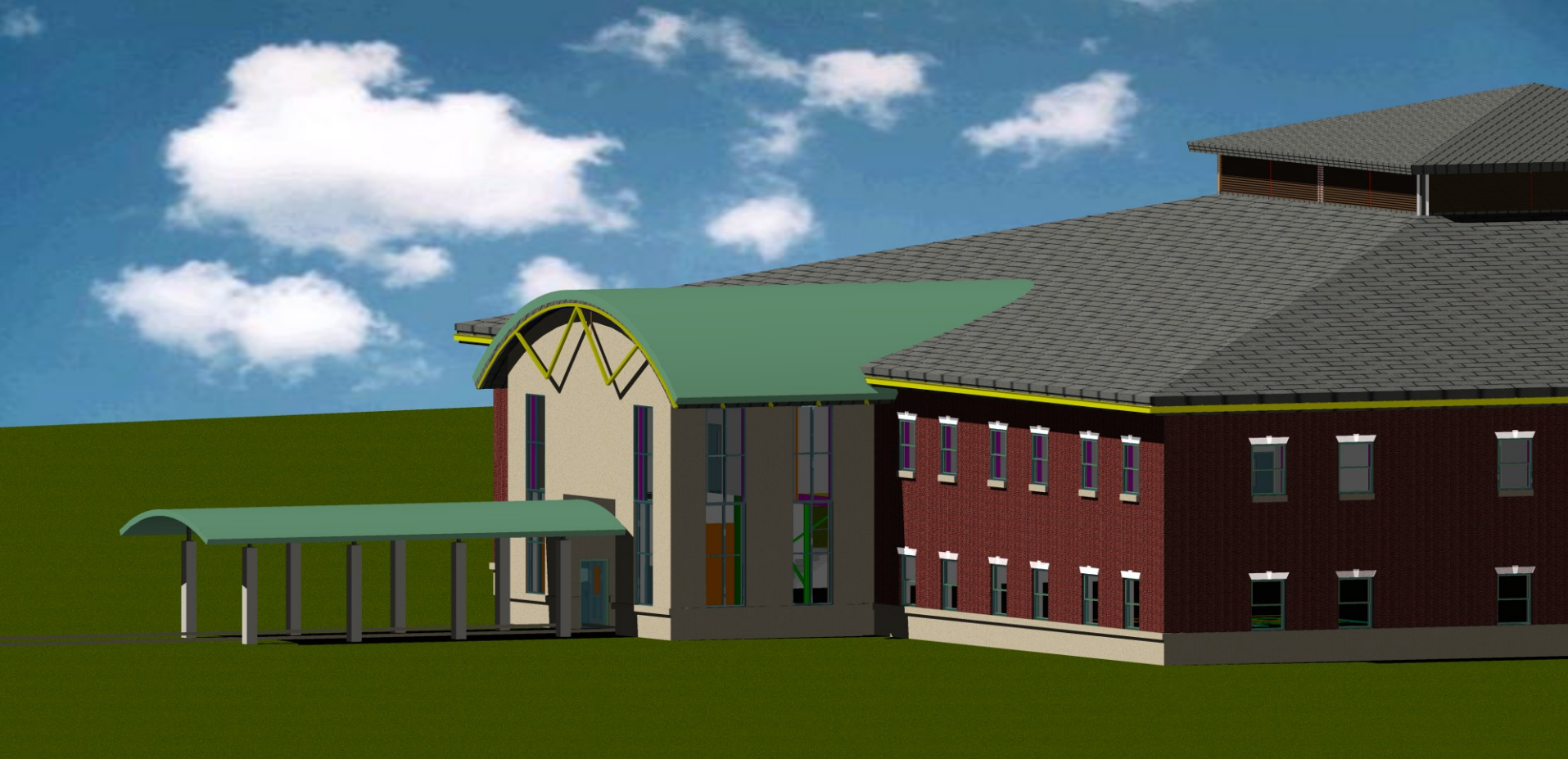


C O S - BIM Responsibilities

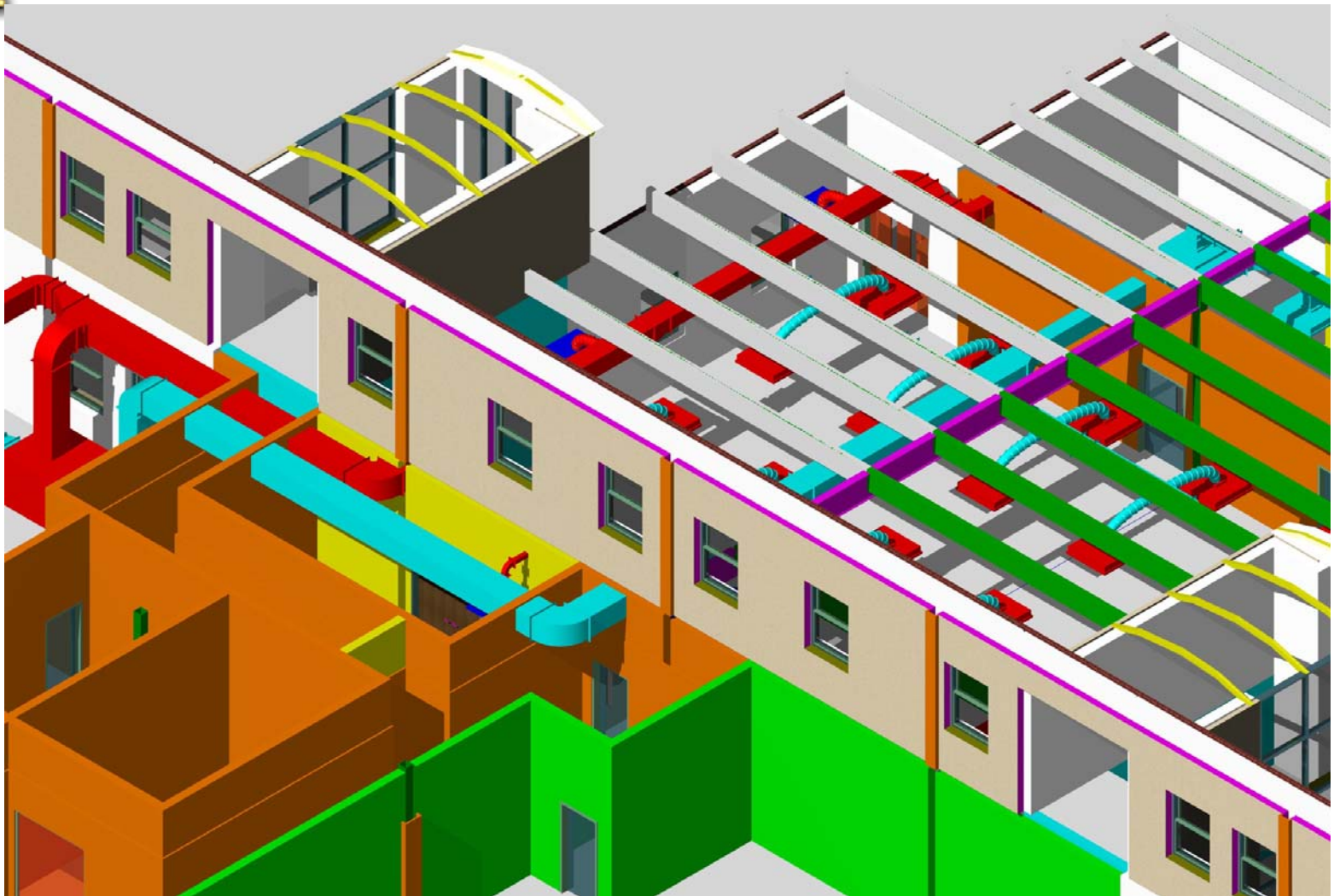
Beginning FY08: Centers have been requested by **OACSIM** to take advantage of Building Information Modeling (BIM) tools for planning, design, construction, and lifecycle building management.

- In-house staffs are training to execute using the software.
- Industry partners will be asked to do the same...

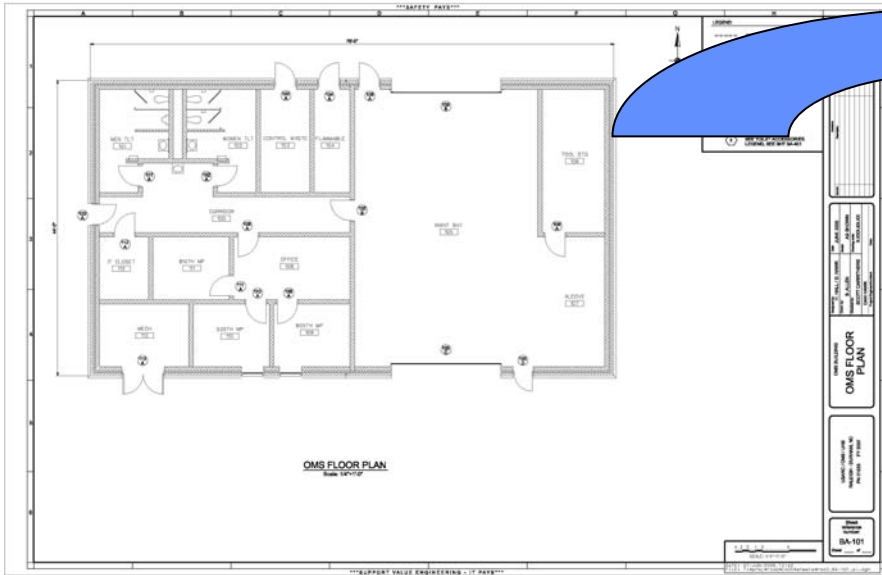




Presentation Renderings and Construction Drawings



Interference Checks/Contractor Planning Tool/Subcontractor Management



O&M Information Links

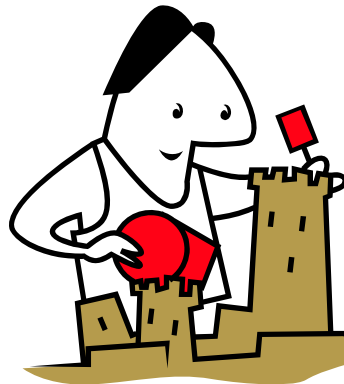
Instance Name	Program Area	Actual Area	Height	Base Finish	Wall Finish	Ceiling Finish
LOBBY AREA	480.000000	89.092254	9'-0"	quarry tile	painted gyp board	ACT
RETENTION OFFICE	250.000000	255.836932	8'-8"	rubber	painted gyp board	ACT
ADMIN SUPPORT AREA - GENERAL	240.000000	83.111111	8'-8"	rubber	painted gyp board	ACT
ADMIN SUPPORT AREA - GENERAL	240.000000	92.240264	8'-8"	rubber	painted gyp board	ACT
ADMIN SUPPORT AREA - GENERAL	240.000000	61.456926	8'-8"	rubber	painted gyp board	ACT
MECHANICAL ROOM	3561	46.444452	8'-8"	none	sealed and painted CMU	exposed structure, paint
PHYSICAL READINESS AREA	1600.000000	1544.712245	8'-8"	rubber	painted gyp board	ACT
FACILITY MAINTENANCE/STORAGE A	200.000000	0.000000	8'-8"	none	painted gyp board	exposed structure, paint
ULA1 WEAPONS SIMULATOR ROOM	1680.000000	1454.264812	8'-8"	rubber	painted gyp board	ACT
TRAINING AIDS STORAGE	160.000000	52.281947	8'-8"	rubber	painted gyp board	ACT
ADMIN SUPPORT AREA - GENERAL	240.000000	0.000000	8'-8"	rubber	painted gyp board	ACT
ADMIN SUPP-NET OPS CTR	320	257.777778	8'-8"	rubber	painted gyp board	ACT
ELECTRICAL SPACE	360.000000	231.354347	8'-8"	rubber	painted gyp board	exposed structure, paint
MECHANICAL ROOM	3561.000000	0.000000	8'-8"	none	sealed and painted CMU	exposed structure, paint
CORRIDOR	3561.000000	0.000000	9'-0"	rubber	painted gyp board	ACT
CORRIDOR	3561.000000	178.669029	9'-0"	rubber	painted gyp board	ACT
CHAIR AND TABLE STORAGE	300.000000	264.444448	10'-0"	rubber	painted gyp board	ACT
ASSEMBLY AREA	3000.000000	2997.777778	14'-0"	rubber	painted gyp board	ACT
KITCHEN - STD DESIGN	811.000000	837.777778	8'-8"	glazed CMU	glazed CMU	epoxy painted cement bc
UNIT/INSTR EQUIP STOR	8391.000000	12472.885316	10'-0"	none	painted CMU	exposed structure, paint
ARMORY	100	108.111045	8'-8"	rubber	painted gyp board	ACT
ARMS VAULT	880.000000	838.118715	8'-2"	none	painted conc.	exposed structure, paint
1ST BN	120	105.777710	8'-8"	rubber	painted gyp board	ACT
2ND BDE	120	105.777706	8'-8"	rubber	painted gyp board	ACT
210TH	120	105.777774	8'-8"	rubber	painted gyp board	ACT
DET #1	120	105.777710	8'-8"	rubber	painted gyp board	ACT
DET #2	120	105.777778	8'-8"	rubber	painted gyp board	ACT
810TH	120	105.777778	8'-8"	rubber	painted gyp board	ACT
1493RD	120	105.777778	8'-8"	rubber	painted gyp board	ACT
535TH	120	105.777778	8'-8"	rubber	painted gyp board	ACT
OFFICE	120	105.777710	8'-8"	rubber	painted gyp board	ACT
805TH	120	105.777778	8'-8"	rubber	painted gyp board	ACT
STAGING	840	610.450714	10'-0"	none	painted CMU	exposed structure, paint
FIRST FLOOR LOBBY	480.000000	1063.629350	9'-0"	quarry tile	painted gyp board	ACT
STAIR # 1	166.842256	166.842256	8'-8"	rubber	painted gyp board	ACT
ELEVATOR	811.000000	68.986211	8'-8"	rubber	painted gyp board	ACT
MEN TOILETS	1341.000000	370.159590	8'-8"	ceramic tile	ceramic tile	epoxy painted cement bc
MEN VEST.	1341	56.222222	8'-8"	ceramic tile	ceramic tile	epoxy painted cement bc
WOMEN VEST.	1341	77.441881	8'-8"	ceramic tile	ceramic tile	epoxy painted cement bc
WOMEN TOILETS	1341	277.906114	8'-8"	ceramic tile	ceramic tile	epoxy painted cement bc
MEN	1341	527.204340	8'-8"	ceramic tile	ceramic tile	epoxy painted cement bc
MEN	1341	72.827082	8'-8"	ceramic tile	ceramic tile	epoxy painted cement bc
MEN LOCKERS	1341.000000	850.701242	8'-8"	ceramic tile	ceramic tile	epoxy painted cement bc
MEN SHOWERS	1341	139.921962	8'-8"	ceramic tile	ceramic tile	epoxy painted cement bc
STAIR # 2	1341.000000	150.000000	8'-8"	rubber	painted gyp board	ACT
KITCHEN'S OFFICE	811.000000	75.111111	8'-8"	glazed CMU	glazed CMU	epoxy painted cement bc
STAIR # 3	811.000000	217.855584	8'-8"	rubber	painted gyp board	ACT

Design information, specifications, catalog cuts, quantities, pictures, maintenance schedules etc.





C O S Execution



“Impacting the future...”



C O S – Impact for the USACE Workforce

- **There will be less in-house facility design for the Army program in geographic districts**
- **Centers of Standardization will be the design centers for the Army standard product-lines who are “Design Police” and protector of the Army Facility Standards**
- **There will be some migration of our technical expertise from the “board” to the “field” for execution of the Army program during the “adapt-build” phase**
- **Workforce will be learning new skill sets as execution processes change**





C O S – Impact for the Construction Community

- **Less up-front project specific design effort**
- **Regional task order award packages to IDIQ D/B contractors based upon a partially developed standard as part of “adapt-build” process**
- **Continual drive to keep up with the state-of-the-art construction materials and methods**
- **Design/construct fewer facility types, but more focus on the few**
- **Deviations from facility standards will require ACSIM approval**
- **Long-term contract relationships/contracts (3-5 yrs.)**





Coming Opportunities for Industry Partners

➤ **At Geographic Districts:**

- Project Site Design/construction
- Full range of consultant activities related to site development
- Full range of activities for projects other than MCA, BRAC 05, and even MCA projects other than the 42 assigned facility product-lines

➤ **At Centers of Standardization**

- Assist the COS develop/update product-line facility designs
- Product-line Design/Build contractor for an IDIQ regional task order contract
- Project Design-Bid-Build contractor





In Summary....

- **The Army is transforming and undergoing the largest building program in its history**
- **Need “leap ahead” solutions rather than “iterative” innovations and investment strategies**
- **MILCON Transformation processes provide facilities without sacrificing quality, sustainability or adaptability**
- **Centers of Standardization allow better leverage of industry “best practices” in a uniform way**





Some Useful Links

- **MILCON Transformation:**
<http://www.hq.usace.army.mil/cemp/milcontrans/milcontransformation.htm>
- **MILCON Transformation D/B RFP:**
<ftp://ftp.usace.army.mil/pub/hqusace/MILCON%20Transformation/>





Comments / Questions!??





MT – What's in '07...

➤ **COS Stand-up Activities:**

- Continue to coordinate efforts through the COS Management Board activities
- Define operating SOP's between COS's and with geographic districts
- Complete the Program Management Plan

➤ **Project Execution Activities:**

- Develop facility standards and prototypical models using BIM software, interface with HQDA proponents
- Put into place the regional construction contract acquisition strategy
- Develop product line D/B-RFP contracts for FY08-FY11 based on FY07 template RFP package
- Issue regional 2-phase procurement D/B-RFP packages for FY 08 construction program
- Perform source selection evaluations and award regional contracts based on FY 08 project specific task orders

➤ **“COS” Training for IMCOM, Garrisons, USACE MSCs & Districts (by HQ USACE E&C):**

- Proof of concept examples and MT processes/concepts
- Provide understanding of MT process and practical application of concepts using an actual FY 07 project/facility type.

“Culture Change – USACE, Installations, Industry”

